

January 3, 1947.

Dear Ed-

WE returned from Chicago and parts south yesterday, and our train, let me tell you, had no easy time of it, with half the telephone ~~poles~~ poles strewn on the tracks between Chicago and Janesville. While some stuff out of the autoclave is cooling I'll try to bring you up to date.

So far, no attempts to produce Cl mutants. My comments on Y-132 may have been somewhat exaggerated, but I'm certain it's not glycineless. Enclosed is a carbon copy of the W- culture list. I assume you will continue to record some of your interesting mutants in the Y series. I will get around to sending the cultures not already shipped briefly, unless you suggest contrariwise. While the purpose of sending them is that they may ultimately be freely available, most important in my mind was the security against loss that it provided, whether you put them in lyophil or no. If it's too much bother say so, and I'll hold off on everything except the most vital.

On the last run attempts to isolate two products from a zygote by plating mixtures on synthetic EMB agar (maltose) were quite successful, a fairly large number of colonies with ~~mal-~~ and ~~mal+~~ components being found. Since there is a definite and rather remarkable correlation between the ~~+~~ and ~~-~~ components the "duplex" colonies are not merely random conjunction of independent segregants. A rather definite interference pattern a la Lindegren is suggested, which as expected, makes the map only a rough first approximation.

You asked about some chemicals. It's possible that in the rush of packing I put away some things that I should better not have. However, the supply of the enzymes left is so small that to split them will leave nothing for either of us. Ribonuclease, I am told, is readily available at a reasonable price from Armour and Co., and I am going to write to Askowski for desoxyribonuclease, and will split with you whatever I do get. I'll send what I can of McCarty's prep pronto-- looking at it now there is more than I thought. I took only about 100 mg. of alpha-ketoglutaric, so you ought to have a couple of grams of that around the lab. Do. the isocitrate dimethyl lactone. Look on Dave's chemical shelf and in the drawer of my old desk. I don't have enough left of either here to do you much good, but let me know if the situation is desperate. Ochoa ought to be able to do handsomely by you.

We heard a lot of gossip around the meetings of course, but none was more startling than the news that you were going back to Stanford. After all the blood and sweat at Yale! Has Dave decided on his plans? I don't dare ask you the "inside" dope, but of course I do hope you'll be getting everything you want at PA and not merely the climate. Your recent snowstorm should have been enough to convince anyone, of course.

Lindegren is at Carbondale, Ill., now as head of the "Dept. Biological Research" where he may be able to do his research in piece. Had a long, interesting talk with him on the train. Jerry wondered if you were sore at them about Reaume's fellowship, and insisted that they had nothing to do with that.

They have had an ~~that~~ indefensible attitude about giving out strains, but they both imply turning over a new leaf and that they will be distributing "key" cultures as soon as they can after setting up at the U. of So. Ill. Their pantothenate story sounds more like selection than ever, although Carl is more than ever convinced that it isn't! The question is still open. At any rate it is a mutation but not to "wild" type, crosses of reverted with wild type giving occasional 3:1 asci in a Mendelizing pedigree.

Sol is finally convinced (as I am) that we don't know enough about segregation in yeast to draw conclusions of cytoplasmic inheritance from crosses, as yet. He is doing an interesting job on a red yeast which he says he isolated from mustard-treated cultures, and which is apparently very similar to Sheldon's. Considering the furor that that culture is causing, perhaps it would have been better for it to have been thrown out as a contaminant, as so improvidently suggested by myself.

Szilard is building himself a neat lab. at the UOIC in the so-called Biophysics Institute. Leo is no idiot, and I think is finally learning enough biology that he turn out some good work, especially with the help of his junior associate, an organic chemist named Aaron Novick, who looks like an extremely capable fellow and is learning phage, genetics, and whatnot at a great rate.

Had a talk with Rubin-- I don't think he has a project, and if he does phage resistance looks like the most suitable character/ at the moment so I referred him to Evelyn Witkin.

W.S. Stone gave me the latest details on their selection experiments and I am inclined to think that they have been inducing mutations with irradiated broth. The main bone of contention: the specificity of the mutations induced is no longer mentioned.

Sol and his crew are of course looking for a job for next year. I suggested to John Reiner that he look you up re work at Stanford. I don't know anything of his lab work, but talking with him I think he has all of Spiegelman's talents plus considerably more caution and circumspection. Sol hinted vaguely at something in Minnesota (or rather everyone else but Sol did) so probably he's fixing a deal.

Witkin complains that most of her mutants are not reverting properly, the number of reversions being out of proportion to the population inoculated. Probably mostly due to minute amounts of growth factors in her medium.

I'm looking out now for a student or two next Fall, to work in bacterial genetics-- the *Phytomonas* problem for example, If you run across anyone really capable that for any reason (stated) you don't want to grab yourself, let me know.

I haven't done anything more that you don't know about. No c-1 runs. How about your transform expts? I hope to be able to prepare some extracts in the next few days. You have the method I used last Spring, do you not?

What's about the whole story, except that our Spring Recess here will be from Sat. Apr. 17 through Sun. Apr. 25. Any date during the week of the 18th will do for my oral as far as I am concerned, preferable about Wednesday or so. I hope this will be satisfactory.

Best Regards;

Yours sincerely,

Josh.